USER MANUAL

15” Multi-Touch Panel PC
IP15ID7T-C3-5RT

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American Industrial Systems, Inc.
http://www.aispro.com

Quick solution for:
- Building automation
- Access control
- Room Information Display

User Guide

15” Multi-Touch Panel PC
IP15ID7T-C3-5RT

Multi Touch Analog Resistive 5-wire
Fanless All-in-one Panel PC
Ultra-low power with Intel Atom D2550 processor

Automation: I/O Ports for HMI/SCADA

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FCC rules:

The test results show that this device meets the FCC rules. Those limits are set to protect residential areas from the devices with harmful emission. This device will produce, use and radiate radio frequency energy. In addition, failure to follow the user's manual to install or use this device might produce harmful interference with radio communication. Notwithstanding the foregoing, it does not guarantee that this type of harmful interference does not occur in some special installations. The interference caused by this device to the reception of radio or television signals may be verified by turning it on and off. Any changes or modifications to this TFT LCD would void the user's authority to operate this device.

Important Recycle Instruction:

Hg Lamp(s) inside this product contains mercury. This product may contain other electronic waste that can be hazardous if not disposed of properly. Recycle or dispose in accordance with local, state, or federal Laws. For more information, contact the Electronic Industries Alliance at WWW.EIAE.ORG. For lamp specific disposal information check WWW.LAMPRECYCLE.ORG

Usage Notice

⚠ ***Warning!***

To prevent the risk of fire or shock hazards, do not expose this product to rain or moisture. Do not open or disassemble the product as this may cause electrical shock.

Precautions

Follow all warnings, precautions and maintenance as recommended in this user's manual to maximize the life of your unit.

Do:

- Turn off the product before cleaning.
- Touch screen surface may be cleaned using a soft clean cloth moistened with mild window glass commercial cleaners or 50/50 mixture of water and isopropyl alcohol.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

Don't:

- Do not touch the LCD Display screen surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
    - Extremely hot, cold or humid environment.
    - Areas susceptible to excessive dust and dirt.
    - Near any appliance generating a strong magnetic field.
    - In direct sunlight.

Introduction

Applications:

Quick solution for:

- Building automation
- Access control
- Room Information Display

Integrated possibilities:

Automation and Security for Home and Building

HVAC environmental control

Factory automation

Industrial HMI and SCADA

Self Service Kiosk in Hotels

Hospitals, airports, and Ticket vending

Vehicle mounted

Equipment and device control

Education

Testing center

About IP15ID7T-C3-5RT

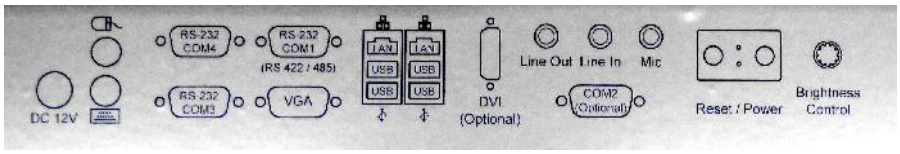
IP = Industrial Panel
15 = 15 Diagonal viewing area in inches
ID3S = Intel Atom duel core
5RT = 5 wire Resistive Touch

Features include:

- Analog 5 wire Resistive multi touch screen
- NEMA 4 IP65 Aluminum Front Bezel
- Active matrix TFT LCD technology
- 1024 x 768 XGA resolution
- 15" viewable display area
- Viewing angle H: 140°, V: 120°
- Contrast Ratio 500:1
- 75 x 75 mm or 100 x 100 mm VESA Mount
- Dimensions (W x H x D) 400 x 320 x 79.8 mm
- OS: Windows Embedded Standard 7 or Windows XP Embedded

Back Panel I/O Port

1 x Power Jack
1 x Keyboard, 1 x Mouse PS2 types
2 x RJ-45 (LAN)
2 x RS-232 only (Com3 and 4) Note# COM2 is optional
1 x RS-232/422/485 (Com 1 configurable)
1 x VGA
4 x USB 2.0
1 x DVI (optional)
1ea. Line Out, Line In and Microphone Jack



Reset button
Power on LED
Hard drive activity LED
Brightness control

Side View

Top Edge Speaker ports

Ethernet interface

The Motherboard is equipped with Broadcom BCM57780 chipset which is fully compliant with the PCI 10/100/1000 Mbps Ethernet protocol compatible. It is supported by major network operating systems. The Ethernet ports provide two standard RJ-45 jacks.

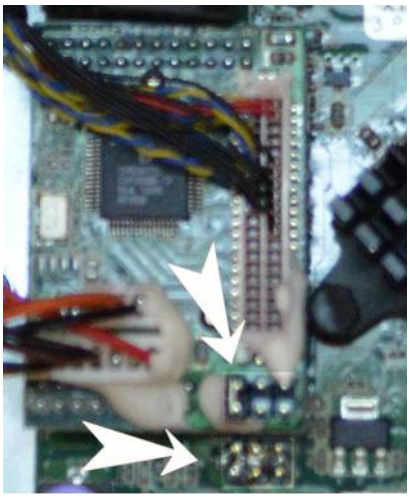
Why 2 Ethernet ports

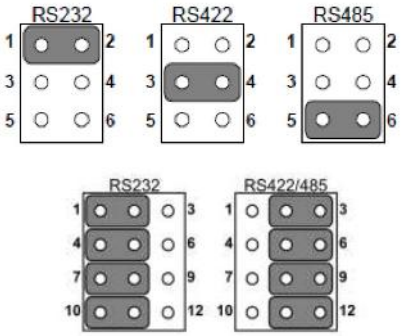
- LAN data collection / storage
- WAN separate and secure
- PLC / machine control interface
- Camera for security or machine vision

Serial COM port

RS-232 only (Com3 and 4) Note# COM2 is optional

RS-232/422/485 (Com 1 configurable) factory jumper setting is RS232.





RS232 / RS422 / RS485

JP2:

Pin No.	Functions
1 Short 2	RS232
3 Short 4	RS422
5 Short 6	RS485

JP3:

RS232	RS422/485
1-2	2-3
4-5	5-6
7-8	8-9
10-11	11-12

Note# The single Jumper is secured with adhesive and the multiple jumpers are secured by the tight fit.

USB ports

4 x USB 2.0 ports Type-A support hot plug-in connection.

VGA port for 2nd industrial monitor

DVI (optional)

Extended monitor support:
- Add camera to watch for deliveries from you work space
- Add machine vision inspection to the machine process
- Use of the Panel PC without blocking the view of critical Gages
- Add remote viewing outside the control room
- Locate the second display closer to the action
- Room Information Display

Mother Board

Product Overview

Processor

The panel PC is integrated with Intel® NM10 express chipset and Atom D2550 - 1.83 GHz Processor. The Intel Atom Processor with 32nm low power design enables down to 50% less average power consumption and the chipset delivers up to 4x improvement in graphics performance and enables up to 50% higher data transfer bus speed rate. Intel Graphic Accelerator 3600 Integrated Graphics Engine, Broadcom BCM57780 GbE controller

Thus, the ID70 SBC is designed to satisfy most of the applications in the industrial computer market, such as Gaming, POS, KIOSK, Industrial Automation, and Programmable Control System. It is a compact design to meet the demanding performance requirements of today's business and industrial applications.

BIOS

AMI BIOs (detailed instructions exist on the CD shipped with the panel)

Just after power on, pressing the Del key will open the BIOs configuration application.

Main Memory

2GB DDR3 800/1066 MHz, up to 4GB

Chipset

Intel® NM10 express chipset

Storage Device

160GB Hard Disk Drive

Dimensions

~400 x 320 x 79.8 mm (also see: Product Mechanical Drawings)

Environmental Requirements

Temperature - Operating: 0°C to 45°C (32°F to 113°F)

Temperature - Storage: -20°C to 60°C (-4°F to 140°F)

Humidity (Non-condensing) - 30 to 90% RH @ 40° C

Vibration Protection - 5 to 500 Hz, 1 Grms random vibration

General

Input Power 12 Terminal Block (Phoenix Type)

MTBF

50,000 Hours Demonstrated

Approvals

Designed for CE/FCC

Display type

15” diagonal, Active matrix TFT LCD

Antiglare
Frame Rate average 60 Hz

Aspect Ratio

4:3 (Widescreen)

Active/Area

304.1 (H) x 228.1 (V) mm

Native (Optimal) Resolution

1024 x 768 XGA

Number of Colors

16.2M (8bits/color)

Brightness (Typical)

LCD Panel: 250 nits

PCT Touch: 200 nits

Contrast Ratio

500:1

Touch Screen

Transmittance 80 %
Antiglare

Viewing Angle

Horizontal: 140° Total

Vertical: 120° Total

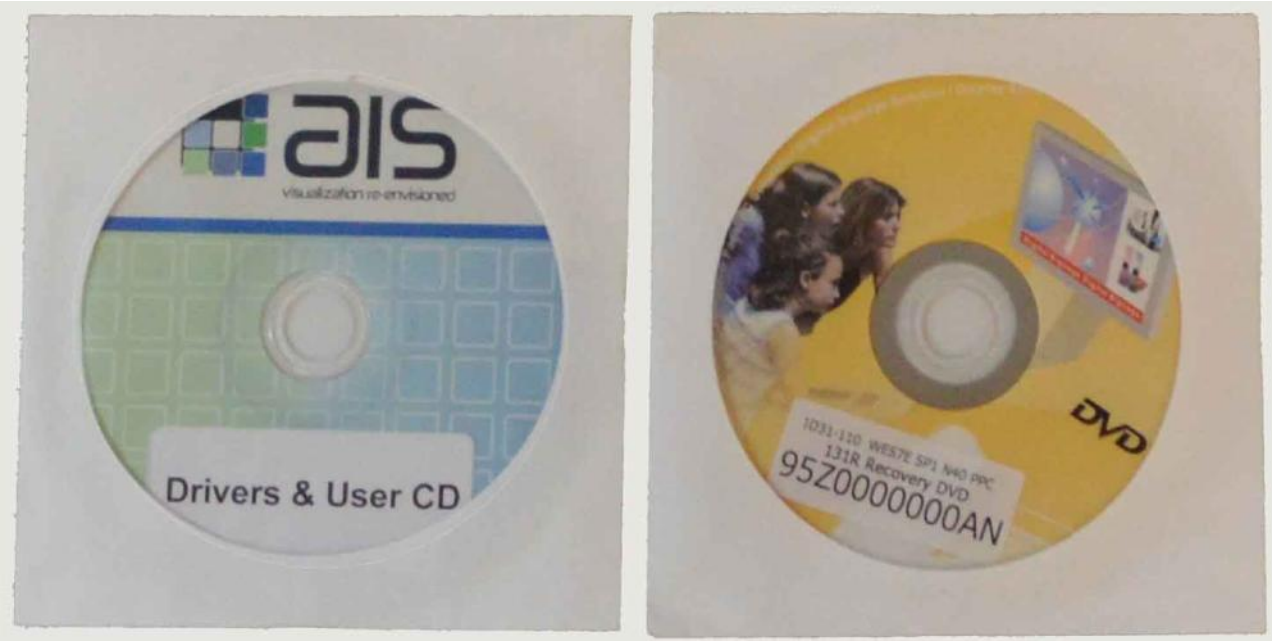
Features and Benefits

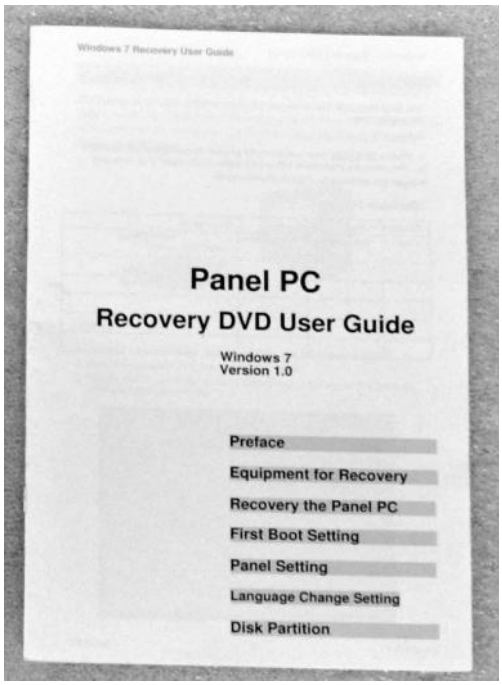
- **Flexible, reliable, and ruggedized for open platform HMI/SCADA**
- **Windows-based, integrated CPU, RAM, data storage, USB, RS232, RS422/485 and Ethernet ports**
- **All steel construction designed for harsh and industrial environments**
- **Supports Panel, Wall, and VESA arm mounting**
- **Technical support for drivers, hardware, including troubleshooting procedures and system issues**
- **Customer service and sales support for product selection, order management, and warranty status**

Package Content

Driver CD for touch screen and other features

Recovery CD for restoring back to factory condition




Windows 7 Recovery User Guide

Panel PC

Recovery DVD User Guide

Windows 7
Version 1.0

Preface
Equipment for Recovery
Recovery the Panel PC
First Boot Setting
Panel Setting
Language Change Setting
Disk Partition

Paper back recovery manual

12 VDC Power supply

Minimum power requirement is 24 watts

Standard AC Power cord

American 3 Prong

Phoenix to power supply prewired

This connector has adhesive as a strain relief.

Wire for screw connectors

This is used when installed in an environment that already has 12 volts available. A second phoenix connector is supplied without adhesive.

Product Dimension